

EX 8. Java program to create student report using applet, read the input using text boxes and display the output using buttons

Aim:

To write a program to create student report using applet, read the input using textbox and display the output using buttons.

Algorithm:

Step1: Start

Step2: Install jdk* and applet won't support from jdk9 and upper versions.

Step3: Now create a student info class and declare all the required labels, textboxes and buttons.

Step4: Create init function and create the labels, text fields and buttons declared in the above class.

Step5: Create the action performed for each text box, Label and button in try and catch blocks to avoid exceptions.

Step6: Stop.

Program:

```
import java.awt.*;
import java.applet.*;
import java.awt.event.*;
public class classtudentreport extends Applet implements ActionListener{
    Label
    lblTitle, lblRegNo, lblName, lblJava, lblSE, lblCA, lblBI, lblSSPD;
    TextField
    txtRegNo, txtName, txtJava, txtSE, txtCA, txtBI, txtSSPD;
    Button
    cmdReport;
    int total;
    float avg;
    public void init(){
        setLayout(null);
        lblTitle = new Label("Enter Student's Details");
        lblRegNo = new Label("Reg.No : ");
```

DATE:

NAME:SHWETA DARSHINI P
REGNO:412521104139.

```
lblName = new Label("Name : ");
lblJava = new Label("Java : ");
lblSE = new Label("SE : ");
lblCA = new Label("CA :");
lblBI = new Label("BI :");
lblSSPD = new Label("SSPD :");
txtRegNo = new TextField(10);
txtName = new TextField(25);
txtJava = new TextField(3);
txtSE = new TextField(3);
txtCA = new TextField(3);
txtBI = new TextField(3);
txtSSPD = new TextField(3);
cmdReport = new Button("View Student Result");
lblTitle.setBounds(100,0,200,20);
lblRegNo.setBounds(0,50,100,20);
txtRegNo.setBounds(120,50,100,20);
lblName.setBounds(0,70,100,20);
txtName.setBounds(120,75,250,20);
lblJava.setBounds(0,100,100,20);
txtJava.setBounds(120,100,40,20);
lblSE.setBounds(0,125,100,20);
txtSE.setBounds(120,125,40,20);
lblCA.setBounds(0,150,100,20);
txtCA.setBounds(120,150,40,20);
lblBI.setBounds(0,175,100,20);
txtBI.setBounds(120,175,40,20);
lblSSPD.setBounds(0,200,100,20);
txtSSPD.setBounds(120,200,40,20);
cmdReport.setBounds(100,225,150,30);
add(lblTitle);
add(lblRegNo);
add(txtRegNo);
add(lblName);
add(txtName);
add(lblJava);
add(txtJava);
```

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```
add(lblSE);
add(txtSE);
add(lblCA);
add(txtCA);
add(lblBI);
add(txtBI);
add(lblSSPD);
add(txtSSPD);
add(cmdReport);
cmdReport.addActionListener(this);
}
public void actionPerformed(ActionEvent ae){
try{
int java = Integer.parseInt(txtJava.getText());
int se = Integer.parseInt(txtSE.getText());
int ca = Integer.parseInt(txtCA.getText());
int bi = Integer.parseInt(txtBI.getText());
int sspd = Integer.parseInt(txtSSPD.getText());
total = (java + se + ca + bi + sspd);
avg = total/5;
}
catch(NumberFormatException e){
}
repaint();
}
public void paint(Graphics g){
g.drawString(" STUDENTREPORT ",100,275);
g.drawString("Reg. No = "+txtRegNo.getText(),0,300);
g.drawString("Name = "+txtName.getText(),0,325);
g.drawString("Java = "+txtJava.getText(),0,350);
g.drawString("Software Engineering = "+txtSE.getText(),0,375);
g.drawString("Computer Architecture = "+txtCA.getText(),0,400);
g.drawString("Banking & Insurance = "+txtBI.getText(),0,425);
g.drawString("SSPD = "+txtSSPD.getText(),0,450);
g.drawString("Total = "+total,0,475);
g.drawString("Average = "+avg,0,500);
}
```

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}

/*<applet code="classstudentreport" height=800 width=800>

</applet>*/

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Output:

Applet Viewer: classstudentreport

Applet

Enter Student's Details

Reg.No :

Name :

Java :

SE :

CA :

BI :

SSPD :

STUDENTREPORT

Reg. No = 412521104139

Name = SHWETA DARSHINI P

Java = 100

Software Engineering = 100

Computer Architecture = 99

Banking & Insurance = 100

SSPD = 99

Total = 498

Average = 99.0

Applet started.

Result:

Thus, the java program to write a program to write a program to create student report using applet, read the input using text boxes and display the output using buttons is executed successfully and output is verified.

EX 10: Java program to Implement Thread, Applets Graphics **Animate Ball Movement**

Aim:

To write a program to implement thread, applets and graphics to animate ball movement.

Algorithm:

Step1: Start

Step2: Import the Necessary packages.

Step3: Set the Backgroundcolor (setBackground method) and the color of the ball (paint method) using methods.

Step4: Create thread and start running it(declare flag variable as true).

Step5: Using the dimensions from the html code, set boundaries within which the ball can move at a certain rate.

Step6: Repaint the scenario at every instance when while loop gets iterated every time.

Program:

```
import java.awt.*;
import java.io.*;
import java.applet.*;
import java.awt.event.*;
public class movingball extends Applet implements Runnable
{
    int x,y,dx,dy;
    Thread t;
    boolean flag;
    public void init()
    {
        setBackground(Color.black);
        x=100;
        y=10;
        dx=10;dy=10;
    }
```

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```
public void start()
{
    flag = true;
    t = new Thread(this);
    t.start();
}
public void paint(Graphics g)
{
    g.setColor(Color.white);
    g.fillOval(x,y,50,50);
}
public void run()
{
    while(flag)
    {
        Rectangle r = getBounds();
        if((x+dx<=0) || (x+dx>=r.width))
        {
            dx=-dx;
        }
        if((y+dy<=0) || (y+dy>=r.height))
        {
            dy=-dy;
        }
        x+=dx;
        y+=dy;
        repaint();
        try{
            Thread.sleep(300);
        }
        catch(InterruptedException e){}
    }
}
public void stop()
{
    t = null;
    flag = false;
}
}
```

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```
/*
```

```
<applet code = "movingball.class" height=100 width = 700></applet>
```

```
*/
```

Output:



Result:

Thus a program to implement thread, applets and graphics to animate ball movement has been successfully executed.